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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/077,727	02/15/2002	David F. Gavin	101792-200	2648
27267	7590 05/12/2005		EXAMINER	
WIGGIN AND DANA LLP			CELSA, BENNETT M	
ATTENTION: PATENT DOCKETING ONE CENTURY TOWER, P.O. BOX 1832 NEW HAVEN, CT 06508-1832			ART UNIT	PAPER NUMBER
			1639	1639

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Comments	10/077,727	GAVIN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Bennett Celsa	1639					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on <u>07 February 2005</u> .							
2a)⊠ This action is FINAL . 2b)□ This	This action is FINAL . 2b) This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.					
Disposition of Claims							
4) Claim(s) 2-11,35-37 and 40 is/are pending in the application.							
4a) Of the above claim(s) 3 and 5 is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
<u> </u>	6)⊠ Claim(s) <u>2,4,6-11, 35-37 and 40</u> is/are rejected.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
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·							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date 6) Other:							

DETAILED ACTION

Response to Amendment

Applicant's amendment dated February 7, 2005 is acknowledged.

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Status of the Claims

Claims 2-11, 35-37 and 40 are currently pending.

Claims 3, 5 are withdrawn from consideration as being directed to a nonelected invention.

Claims 2, 4, 6-11, 35-37 and 40 are under consideration.

Election/Restrictions

- 2. Applicant's election with traverse of Group I (claims 2-11 and 35-37 and new claim 40) drawn to biocidal composition comprising particles of metal core and pyrithione adduct shell) in the correspondence dated 5/26/04 is again acknowledged. Applicant's further election of copper oxide (as the metal species) and sodium pyrithione (as the pyrithione compound) in the correspondence dated 5/26/04 is again acknowledged.
- 3. Claims 3 and 5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention. This application contains claim 3 and 5 drawn to an invention nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

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Withdrawn Objection (s) and/or Rejection (s)

Applicant's amendment has overcome the rejection of claim 4 of the term "rations".

Applicant's amendment has overcome the indefinite rejection (e.g. items A-F).

Outstanding Objection (s) and/or Rejection (s)

4. Claims 2, 4, 6-10 and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hosseini et al. US Pat. No. 5,540,860 (7/96) alone or if necessary further in view of the specification {e.g. page 7, figures (e.g. fig. 2) and examples (e.g. example 1) to demonstrate inherency (e.g. see *Ex parte Novitski*, 26 USPQ2d 1389 (B.P.A.I, 1993); MPEP 2131.01(d)

The present invention is directed to:

A biocidal composition comprising composite particles (shell/core) wherein:

- a. The core comprises:
- -surface oxidized copper powder or
- -a copper compound (cuprous oxide, copper hydroxide or a copper containing salt(s))
 AND
- b. The-shell-comprises "copper-pyrithione"-formed-by-reacting:

 pyrithione acid or water soluble salt of pyrithione AND portion of copper or copper compound of core.

It is noteworthy that the present claim recites the metal pyrithione shell by its means of manufacture e.g. in product-by-process format (e.g. *metal pyrithione is formed by reacting a pyrithione acid/salt with the core metal/metal compound*).

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Hosseini teaches a "biocidal composition" (e.g. see col. 1, especially lines 45-50) comprising "particles" (e.g. spheres) of "copper pyrithione" formed by aqueous mixing:

a. "a copper compound" (e.g. a "copper salt" such as copper chloride or copper sulfate) and

b "a pyrithione salt"

(see col. 2, example 1).

The Hossein et al. method teaches the use of pyrithione salts between about 1 to about 40% (based on total composition weight), between 5 and 25% and 15 and 25% (e.g. see Hossein at col. 2, especially lines 54-60) which anticipates, or alternatively renders obvious the percentage amounts of copper pyrithione adduct shell of present claims 7-9, respectively since the reference amounts are within the scope of the claimed amounts. The Hossein teaching of "between about one and about 40% of the pyrithione salt" would anticipate or render obvious the corresponding copper/copper compound amount of "about 99% to about 60%" as presently claimed in claim 4; and additionally, the proportions of the Hossein components (e.g. see bottom of col.2) are within the scope of the wide ratio proportion (1:20 to 20:1) (see present claim 40) of core/shell ingredients:

Hosseini teach the optional surfactant coating of its particles (e.g. see col. 2, lines 10-17) anticipating present claim 10.

To the extent that the Hossein reference biocidal copper pyrithione (e.g. sherical) particles differ by failing to explicitly teach the physical nature of the resulting particle

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e.g. a copper pyrithione "shell" and copper/copper compound "core" such a physical arrangement MUST be inherently present in the Hossein particles since:

- a. The Hossein particles are composed of the same ingredients and in the same amounts as the presently claimed particles;
- b. The Hossein particles are formulated in the same manner (compare patent example 1 and specification example 1) are shaped and sized (e.g. spherical and about 2-15 micron diameter) as particles disclosed in the present specification(e.g. see columns 2 and 7 of the reference and compare to specification page 7 and specification figure 2); and
- c. In light of the specification disclosure which teaches that a composite particle containing a metal (e.g copper) "core" coated with a copper pyrithione "shell" results upon aqueous mixing a copper compound and a pyrithione salt (e.g. sodium pyrithione as found in both the reference and specification example) followed by the precipitation protocol. E.g. see present specification page

IN this regard, it is noted that where the claimed and prior art products are identical or substantially identical in structure or composition (as in the present case) AND/OR-is-produced-by-identical-or-substantially-identical-processes,-a-prima-facie—case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the appellant and the prior art are the same, the appellant has the burden of showing that they are not" *In re Spada*, 911 F.2d 705, 709,15 USPQ2d 1655, 1658 (Fed. Cir. 1990). For a chemical composition and its

properties are inseparable. Therefore, since the prior art teaches the identical or substantially identical chemical structure, the properties appellant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658(Fed. Cir. 1990); and MPEP 2112.01. The PTO lacks the facilities for making comparisons between prior art and claimed compositions.

Discussion

Arguments directed to the above 102/103 rejection over the Hosseini reference were considered but deemed nonpersuasive for the following reasons. Initially, it is noted that the above rejection was modified in response to applicant's amendment.

Applicant argues that the Hosseini '860 patent reference fails to anticipate the presently claimed invention since it fails to teach or suggest biocidal compositions comprising composite particles comprising a shell and core and fails to disclose or suggest a composite particle shell containing any range or amounts of copper pyrithione, much less the instantly claimed range.

This is not persuasive for the reasons provided in the rejection. To the extent that the Hossein reference biocidal copper pyrithione (e.g. sherical) particles differ by failing to-explicitly-teach-the-physical-nature-of-the-resulting-particle-e.g.-a-copper-pyrithione "shell" and copper/copper compound "core" such a physical arrangement MUST be inherently present in the Hossein particles since:

a. The Hossein particles are composed of the same ingredients and in the same amounts as the presently claimed particles;

b. The Hossein particles are formulated in the same manner (compare patent example 1 and specification example 1) are shaped and sized (e.g. spherical and about 2-15 micron diameter) as particles disclosed in the present specification(e.g. see columns 2 and 7 of the reference and compare to specification page 7 and specification figure 2); and

c. In light of the specification disclosure which teaches that a composite particle containing a metal (e.g copper) "core" coated with a copper pyrithione "shell" results upon aqueous mixing a copper compound and a pyrithione salt (e.g. sodium pyrithione as found in both the reference and specification example) followed by the precipitation protocol. E.g. see present specification page

IN this regard, it is noted that where the claimed and prior art products are identical or substantially identical in structure or composition (as in the present case) AND/OR is produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the appellant and the prior art are the same, the appellant has the burden-of-showing-that-they-are-not". *In-re-Spada*, 911–F.2d-705, 709,15-USPQ2d-1655, 1658 (Fed. Cir. 1990).

Additionally, the Hossein et al. method teaches the use of pyrithione salts between about 1 to about 40% (based on total composition weight), between 5 and 25% and 15 and 25% (e.g. see Hossein at col. 2, especially lines 54-60) which anticipates, or alternatively renders obvious the percentage amounts of copper pyrithione adduct

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shell of present claims 7-9, respectively since the reference amounts are within the scope of the claimed amounts. The Hossein teaching of "between about one and about 40% of the pyrithione salt" would anticipate or render obvious the corresponding copper/copper compound amount of "about 99% to about 60%" as presently claimed in claim 4; and additionally, the proportions of the Hossein components (e.g. see bottom of col.2) are within the scope of the wide ratio proportion (1:20 to 20:1) (see present claim 40) of core/shell ingredients.

Accordingly, the above anticipation rejection is hereby maintained.

5. Claims 2, 4, 6-11 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosseini et al. '860 alone or in view of the specification (e.g. page 7, figures (e.g. fig. 2) and examples (e.g. example 1) to demonstrate inherency and Gavin et al. US Pat. 5,342,437 (8/94).

The substance of the 102/103 rejection of claims 2, 4, 6-10 and 40 over Hosseini et al. alone or in view of the specification is herein incorporated by reference in its entirety.

The-Hosseini-et-al-particles-differ-from-composition-of-claim-10-(in-part)-and-claim 11 by failing to teach utilizing a "fatty acid coating" (e.g. stearic, linoleic, oleic etc.).

In this regard, Hosseini et al. Reference (e.g. see col. 1) teaches that pyrithione salts in the form of crystals(e.g. platelets) are incorporated into manufacturing articles including paints (e.g. coating compositions); with the *problem of "gellation"* during the

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production of copper pyrithione solution or dispersion occurring. The Hosseini solution to the gellation problem is to use a "surfactant coat" in its copper pyrithione particles.

However Gavin et al. teach that incorporating fatty acids(e.g. stearic, linoleic, oleic etc.) into its pyrithione compositions (e.g. zinc pyrithione/cuprous oxide) prior to incorporation into manufacturing articles (e.g. coating compositions such as paints) solves the gellation problem.

Accordingly, one of ordinary skill in the art at the time of applicant's invention would be motivated to apply a "fatty acid" particle coat, in addition or, *in lieu* of the "surfactant coat" in order to address the gellation problem.

Thus, it would have been prima facie obvious to one of ordinary skill in the art at the time of applicant's invention to modify the Hosseini et al. Reference particle to apply a "fatty acid" coat in light of the Gavin reference teaching that to do so would address the gellation problem recognized by both the Hosseini and Gavin references.

Arguments directed to the above 102/103 rejection over the Hosseini reference were considered but deemed nonpersuasive for the following reasons. Initially, it is noted that the above rejection was modified in response to applicant's amendment.

-Discussion-

Arguments directed to the above 103 rejection over the Hosseini and Gavin references were considered but deemed nonpersuasive for the following reasons. Initially, it is noted that the above rejection was modified in response to applicant's amendment.

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Applicant's arguments directed to the 102/103 rejection over the Hosseini reference and the Examiner's rebuttal in the Discussion of the 102/103 are herein incorporated by reference in its entirety.

Applicant argues that Gavin et al. does not suggest biocidal compositions comprising composite particles.

In response to applicant's arguments against the Gavin references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that the rejection based on the combination of the Hosseini and Gavin references is untenable because these references do not disclose or suggest the biocidal composition comprising particles that include a shell and a core.

This argument is not considered persuasive for the reasons already addressed in the Examiner's rebuttal of applicant's arguments directed to the 102/103 rejection over the Hosseini reference alone.

Applicant-further-argues-that-the-Hosseini-and-Gavin-references-are-not—combinable since these references relate to disparate fields of technology since Gavin relates to zinc pyrithione containing paints which are subject to gellation, and Hosseini relates to copper pyrithione containing paints which aren't.

In response to applicant's argument that the Hosseini and Gavin references are nonanalogous art, it has been held that a prior art reference must either be in the field of

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applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Hosseini and Gavin references are BOTH "in the field of applicant's endeavor" AND/OR "reasonably pertinent to the particular problem with which the applicant was concerned". For example, both references teach the incorporation of pyrithione containing (e.g. zinc/copper) compositions into the same or similar products (e.g. paints) for purposes of addressing the same or similar problems (e.g. antifouling; biocidal) and possessing the same or similar benefits (e.g. prevent gellation; less toxic e.g. environmentally friendly). Accordingly, the Hosseini and Gavin reference are clearly analogous.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.—See-In-re-Fine,-837-F.2d-1071,-5-USPQ2d-1596 (Fed.-Cir.-1988) and In-re——Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the above rejection provides ample motivation to combine the references e.g. one would be motivated to apply a "fatty acid" particle coat, in addition or, in lieu of the "surfactant coat" in order to address the gellation problem.

Accordingly, the above obviousness rejection is hereby maintained.

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6. Claims 2, 4, 6-10, 35-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosseini et al.'860 alone or in view of the specification (e.g. page 7, figures (e.g. fig. 2) and examples (e.g. example 1) to demonstrate inherency and Kappock et al. US Pat. 5,518,774 (5/96).

The substance of the 102/103 rejection of claims 2, 4, 6-10 and 40 over Hosseini et al. alone or in view of the specification is herein incorporated by reference in its entirety.

The Hosseini et al. spherical particles differ from the presently claimed invention by failing to explicitly teach:

- a. selection of "copper oxide" as the metal ion containing compound for use with the pyrithione salt to form copper pyrithione (claim 35); and
- b. Copper oxide/copper pyrithione ratio of 5:1 to 15:1 or 10:1 with a "diameter of the coating material" about 1% of the "particle". (claims 36 and 37).

Kappock et al. teach that "transchelation" of a soluble pyrithione salt (such as sodium pyrithione) with a metal ion-containing compound to form insoluble pyrithione salts afford an excellent combination "in can" and "dry film" antimicrobial protection to an aqueous-coating-(e.g.-paint)-composition-(E.g.-see-col.-2,-lines-30-40). Preferred-metals include copper in the form of "copper oxide" or "copper sulfate" with a copper oxide/copper pyrithione ratio of "between about 1:10 and about 10:1"; in which the amount of metal ion compound can vary (e.g. .001% or lower to 10% or greater, preferably between 0.005% and 1%) and include optimization so as to enable complete conversion of the pyrithione salt by transchelation to metal pyrithione during storage of

the coating composition. See Kappock et al. Col. 2-3, especially col. 3, lines 12-32; patent claims 4-8.

Accordingly, the Kappock reference would provide motivation to one of ordinary skill in the art to modify the Hosseini copper pyrithione solid particle (e.g. for use in a coating composition such as paint) by substituting copper oxide for the Hosseini copper salt (e.g. copper sulfate: col. 2, lines 58-66) since:

- a. The references' teaching of functional equivalency of copper oxide and copper sulfate since both references teach copper sulfate but Kappock further utilized copper oxide; and
- b. In view of the benefits taught by the Kappock reference of utilizing copper oxide e.g. excellent combination "in can" and "dry film" antimicrobial protection to an aqueous coating (e.g. paint) composition.

Similarly, the Kappock reference provides one of ordinary skill in the art with copper oxide/copper pyrithione ratios (e.g.about 10:1) with additional motivation to optimize (e.g. enable complete conversion of the pyrithionie salt to metal pyrithione) to achieve amounts within the scope of the presently claimed invention of 5:1 to 15:1 or 10:1-with-a-diameter-of-the-coating-material-dout-1%-of-the-particle.

Thus it would have been prima facie obvious to one of ordinary skll in the art to modify the Hosseini et al. spherical particles by

- a. selecting "copper oxide" as the metal ion containing compound for use with the pyrithione salt to form copper pyrithione (claim 35); and
- b. utilize copper oxide/copper pyrithione ratio of 5:1 to 15:1 or 10:1

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within the scope of the presently claimed invention (e.g. claims 35-37).

Regarding the claimed limitation "diameter of the coating material" about 1% of the "particle" (claims 36 and 37) it is noted that:

a. Modification of the Hosseini et al. reference in view of the Kappock reference teaching would result in "spherical particles" which contain the same components in the same amounts as the presently claimed invention which are made in an analogous manner.

In this regard, it is noted that where the claimed and prior art products are identical or substantially identical in structure or composition (as in the present case) AND/OR is produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the appellant and the prior art are the same, the appellant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709,15 USPQ2d 1655, 1658 (Fed. Cir. 1990). For a chemical composition and its properties are inseparable. Therefore, since the prior art teaches the identical or substantially-identical–chemical-structure, the properties appellant discloses and/or—claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658(Fed. Cir. 1990); and MPEP 2112.01. The PTO lacks the facilities for making comparisons between prior art and claimed compositions.

Alternatively, controlling reaction parameters in order to obtain "optimum spherical particles" (e.g. about 1% of the "particle; would be within the skill of the art and obvious to one of ordinary skill in the art.

Discussion

Arguments directed to the above 103 rejection over the Hosseini and Kappock et al. references were considered but deemed nonpersuasive for the following reasons. Initially, it is noted that the above rejection was modified in response to applicant's amendment.

Applicant argues that Hosseini does not teach or suggest the biocidal composition of the present invention, and Kappock et al. teaches away from forming the biocidal compositions of the present invention, in favor of complete transchelaion (vs. a portion as presenty claimed).

Regarding applicant's rebuttal of the Hosseini reference, the Examiner's rebuttal of Applicant's arguments directed to the 102/103 rejection over the Hosseini reference in the Discussion of the 102/103 is herein incorporated by reference in its entirety

Applicant's teaching away argument regarding the Kappock reference was considered-but-deemed-nonpersuasive-for_the-following_reasons._____

First, the Kappock reference teaches a concentration range (e.g. see col. 3, especially lines 15-28) which is within the scope of the presently claimed invention and thus MUST encompass "partial" transchelation. Additionally, a reference teaching of different degrees of its embodiments (e.g. more or less preferred embodiment) is not a teaching away as argued by applicant, especially where, as in the present case the

Kappock reference teaches the beneficial employment of concentrations short of complete transchelation.

Accordingly, the above rejection is hereby maintained.

New Objection (s) and/or Rejection (s) Claim Rejections - 35 USC § 112

7. Claim 37 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. (NEW MATTER REJECTION).

Applicant's amendment changing the 10:1 weight ratio of copper oxide to copper pyrithione from applying to the diameter of the **coating material** to applying to the **shell** constitutes new matter since neither the specification nor the original claims provide support for this amendment; nor has applicant indicated where such support exists.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Future Correspondences

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bennett Celsa whose telephone number is 571-272-0807. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for <u>published applications may be obtained from either Private PAIR or Public PAIR.</u>

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bennett Celsa Primary Examiner Art Unit 1639

BC May 5, 2005